TASK ORDER #47QFCA18F0073

Enterprise Machine Learning Analytics and Persistent Services (eMAPS)

in support of:

United States Government (USG) Program Office

Awarded to

Booz Allen Hamilton
8283 Greensboro Drive
McLean, VA 22102

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C.1 BACKGROUND

The Government is collecting an unprecedented amount of Intelligence Surveillance Reconnaissance (ISR) data and information and it is overwhelming in terms of volume, velocity, and variety. The United States Government (USG) Program Office has a requirement to develop and integrate an open systems architecture that introduces Enterprise Machine Learning Analytics and Persistent Services (eMAPS). The architecture shall be designed to increase the ability to use information obtained from integrated systems to support intelligence, processing, exploitation and dissemination, Mission Command, network systems integration and transmissions support, and Cyber Exploitation disciplines.

The Department of Defense (DoD) has directed that an open standards system approach be used, to the maximum extent practical, as an approach to achieving superior war fighting capability with reduced total operating costs. Open standards systems are expected to control development costs, provide quicker access to emergent technologies, significantly improve network performance, and reduce the costs to maintain and upgrade network systems over ever increasing lifetimes.

C.1.1 PURPOSE

The purpose of this requirement is to deliver enterprise class, industry standard, open architecture equipment and services to support the USG Program Office, DoD partners, and other organizations as determined to include, but not limited to, interagency partners, the Intelligence Community (IC), and coalition partners. There are multiple subtasks within each of the included tasks spanning multiple organizations within the USG Program Office. All tasks are to be supported equally without any one task or subtask being the primary focus of this requirement. This requirement is not focused on any singular capability but rather the full spectrum of Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) support, development, procurement, and integration. Support covers a wide range of technologies to include, but not limited to, neural machine translation, agile software development, expertise in deployable processing, exploitation and dissemination, and deployable integrated mission command. Providing support in this environment also requires an in-depth knowledge of mission-specific operational requirements for several organizations and disciplines leveraged in multiple geographical locations including Continental United States (CONUS) and Outside the Continental United States (OCONUS). The USG Program Office anticipates no more than 20 percent of the travel requirements to be OCONUS. In some cases, the USG Program Office may leverage Commercial Off-The-Shelf (COTS) or Government Off-The-Shelf (GOTS) capabilities to fill a requirements gap. If no COTS or GOTS solution can completely fill the requirements gap, an interim solution of utilizing a COTS or GOTS solution that may not completely meet the requirement would be acceptable in the interest of mission criticality. This solution shall be compliant with all specifications outlined in this document (e.g., Risk Management Framework (RMF), Technology Readiness Level (TRL) 7, etc.). The desire would be to then replace the COTS or GOTS solution with a custom solution or an emergent COTS or GOTS solution that can completely fill the requirements gap.

SECTION C – DESCRIPTION / SPECIFICATIONS / PERFORMANCE WORK STATEMENT

C.2 SCOPE

The USG Program Office requires delivery of eMAPS services to support a global architecture comprised of a variety of technologies, ecosystems, and capabilities. The architecture includes expeditionary, mounted (e.g., maritime, vehicles, and aircraft), dismounted, operating bases, fixed ground stations, and garrison headquarters. Main locations are network capable while remote sites are network constrained. Along with machine learning, artificial intelligence, mobile information technology (IT), cloud computing, Internet of Things (IoT), biometrics, virtual networking, software application integration, big data, cyber security technologies, ecosystems, and capabilities comprise the desired future architecture. The architecture and services shall be integrated, deployed, operated, and maintained on unclassified and classified networks to include commercial cloud and Government-classified cloud and coalition networks. The architecture shall support rapidly fielding innovative solutions for mission critical capabilities to address time-sensitive requirements. Systems, techniques, and procedures shall enable the efficient management of individual identities, persistent and non-persistent data, and transactional and non-transactional data. Approximately 20 percent of this requirement is being delivered currently by another contract vehicle that is scheduled to expire June 6, 2018 (with option periods through December 2018 as necessary for transition). The solution developed by the contractor shall continue to support the current architecture and/or subsequently replace it with the new architecture. The current architecture will be defined in the current solution provider's transition-out plan and delivered to the awardee upon award; it shall be incorporated into the awardee's updated draft Transition-In Plan (Section F, Deliverable 13) due at the Kick-Off Meeting. The following support tasks will be transferred from the current effort to this requirement:

a. Machine Learning

b. Enterprise Architecture Support

   1. Publicly Avalable Information (PAI) tasks

   2. Web service development and integration

C.3 CURRENT INFORMATION TECHNOLOGY (IT)/NETWORK ENVIRONMENT

The USG Program Office currently supports multiple global networks of differing classifications in order to provide C4ISR to multiple DoD organizations and other Governmental partner agencies. There are approximately 100,000 users spread over 45 main sites and 200 remote sites. Growth in terms of data and infrastructure is not expected to exceed an increase of 50 percent with respect to users and/or sites over the life of the TO. These sites are interconnected with both terrestrial and non-terrestrial links, providing a fully meshed, fault tolerant, high-speed, secure communications infrastructure. Terrestrial links are a combination of commercial leased circuits, DoD-owned circuits, leased fiber optics, and DoD-owned fiber optics. Non-terrestrial links consist of high-speed wideband satellite architectures that include Wideband Global Satellite Communications (SATCOM) system (WGS), Société Européenne des Satellites (SES) Other 3 Billion (O3B), and Ovzon OHO among others. These various satellite systems support the X, Ka, and Ku bands. These satellite systems include fixed station, mobile ground vehicular, man packed mobile ground, portable maritime, hardened maritime, and airborne platforms. Additional

technologies, such as Line of Sight (LOS) and Beyond Line of Sight (BLOS) Radio Frequency (RF) transmission systems, free space optical carriers, and Common Data Link/Bandwidth Efficient Common Data Link (CDL/BECDL) systems are also used.

The underlying routing and switching hardware is a combination of platforms, to include Cisco, Juniper, F5, and others. Wide Area Network (WAN) acceleration technologies utilized include, but are not limited to, RiverBed appliances (physical and virtual) and software optimization solutions such as IBM Aspera. The multiple datacenters house physical servers as well as leverage virtualization services including, but not limited to, VMware and Microsoft Hyper-V. These are running on multiple compute platforms from manufactures such as Dell, HP, Penguin, Cisco, and others. Storage architectures include systems from NetApp, Dell/EMC, Supermicro, and others. Hyper-converged infrastructure and mobile solutions, such as Nutanix and Klas Telecom, are also currently supported. On-premises cloud solutions are leveraged for multiple X as a Service (XaaS) solutions, such as Software as a Service, Desktop as a Service (Virtual Desktop Infrastructure), Infrastructure as a Service, and Platform as a Service.

C.4   OBJECTIVE

The contractor shall provide an eMAPS solution that will enable the USG Program Office to rapidly employ artificial intelligence, neural, and deep neural networks. The solution shall be capable of performing machine learning and provide the ability to search, visualize, and geospatially render the data. The solution shall also be capable of searching, visualizing, and geospatially rendering the output from other machine learning algorithms. The machine learning solution shall be capable of providing a multitude of applications that enable classification, assessment, recognition, identification, forecasting, and prediction. The enormous amount of data collected from the myriad of airborne, ground, maritime, and other ISR platforms, and its need to shorten collection times, necessitates the USG Program Office to swiftly move into the machine learning era.

Machine learning shall be used for data analytics through the implementation of various algorithms that shall predict, uncover, and determine historical relationships and trends in data. By integrating various algorithms and running the data through these algorithms at the point of ingestion, users' data shall automatically be filtered and organized. Integrating machine learning shall enable predictive analysis, statistical analysis, pattern analysis, pattern recognition, full text analysis, and data recognition across multiple data sets and mission profiles. The end result shall be reliable and repeatable decisions and results that uncover hidden insights through trends in data and make predictions based upon patterns and recognition.

The architecture shall support data demands and speed of decisive action operations and production of intelligence products. The architecture shall enable operations and intelligence in situations with degraded bandwidth. The architecture shall reduce the burden placed on its spectrum, use bandwidth efficiently, and secure the data and networks appropriately. The architecture shall distribute data with no single point of failure and replicate data to nodes across multiple data centers. Bandwidth shall be able to be throttled to ensure disadvantaged users aren't overwhelmed. The architecture shall support ruggedized, lightweight, and

tactical/expeditionary missions. This includes a disconnected environment that displays both Friendly and Hostile forces in a Common Operating Picture (COP) simultaneously.

The architecture shall fully support cyber security requirements and have met IC Directive 503 RMF. The architecture shall distribute data with the appropriate classification markings and the solution shall be repeatable across all networks to include cloud solutions, Secure Internet Protocol Network (SIPRNet) and Joint Worldwide Intelligence Communications System (JWICS) domains, as well as Partner and Coalition networks. The architecture shall leverage the local domain to discover the permissions for each user that attempts to access the solution. A comparison of the user's permissions with the access requirements for the requested data is necessary, and if there is a match, the solution shall authorize the user access to the data.

With an architecture in place that enables machine learning and reduces burden on its spectrum as it uses bandwidth efficiently, and with the networks appropriately secured, the USG Program Office can integrate solutions for operators and analysts that are capable of providing the following:

a. ISR, Processing, Exploitation, and Dissemination Correlation.
b. Social Media perspectives.
c. Ground Sensor and Pattern of Life (POL) Activity that includes Facial Recognition, Movement, Equipment, Location and Counts, and analysis to support Operational Environment (Terrain and Threat).
d. Course of Action Analysis to include the ability to hypothesize future threat actions, Targets Effects (Plan, Execute, and Assess), and analysis.
e. Information Collection (Plan, Execute, and Assess) Analysis and develop and visualize the COP.
f. Exploit and analyze PAI.

C.5 TASKS

a. Task 1 – Provide Project Management Support
b. Task 2 – Provide Transition Support
c. Task 3 – Provide Engineering Support
d. Task 4 – Provide Capability and Asset Management Support
e. Task 5 – Provide Technical Installation and Integration Support
f. Task 6 – Provide Training and System Transition Support
g. Task 7 – Provide Additional eMAPS Augmented Support (Optional)

All performance under this TO shall utilize industry best practices at a minimum. All technical definitions of terms shall be in line with the latest National Institute of Standards and Technology (NIST) definitions and/or applicable Government regulations. For example, Cloud Computing would be defined thusly "Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with

minimal management effort or service provider interaction." (https://www.nist.gov/programs-projects/nist-cloud-computing-program-nccp)

C.5.1   TASK 1 – PROVIDE PROJECT MANAGEMENT SUPPORT

The contractor shall provide project management support under this TO. This includes the management and oversight of all activities performed by contractor personnel, including subcontractors, to satisfy the requirements identified in this Performance Work Statement (PWS). The contractor shall identify a Project Manager (PM) by name who shall provide management, direction, administration, quality assurance, and leadership of the execution of this TO.

C.5.1.1   SUBTASK 1 – ACCOUNTING FOR CONTRACTOR MANPOWER REPORTING

The contractor shall report ALL contractor labor hours (including subcontractor labor hours) required for performance of services provided under this contract for the USG Program Office via a secure data collection site. The contractor shall completely fill in all required data fields using the following web address: http://www.ecmra.mil/.

Reporting inputs will be for the labor executed during the period of performance during each Government Fiscal Year (FY), which runs October 1 through September 30. While inputs may be reported any time during the FY, all data shall be reported no later than October 31 of each calendar year. Contractors may direct questions to the support desk at: http://www.ecmra.mil/.

Contractors may use Extensible Markup Language (XML) data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a contractor's systems to the secure web site without the need for separate data entries for each required data element at the website. The specific formats for the XML direct transfer may be downloaded from the web.

C.5.1.2   SUBTASK 2 – COORDINATE A PROJECT KICK-OFF MEETING

The contractor shall schedule, coordinate, and host a Project Kick-Off Meeting at the location approved by the Government (Section F, Deliverable 02). The meeting will provide an introduction between the contractor personnel and Government personnel who will be involved with the TO. The meeting will provide the opportunity to discuss technical, management, and security issues, and travel authorization and reporting procedures. At a minimum, the attendees shall include Key contractor Personnel, representatives from the directorates, other relevant Government personnel, and the FEDSIM Contracting Officer's Representative (COR).

At least three days prior to the Kick-Off Meeting, the contractor shall provide a Kick-Off Meeting Agenda (Section F, Deliverable 01) for review and approval by the FEDSIM COR and the USG Program Office Technical Point of Contact (TPOC) prior to finalizing. The agenda shall include, at a minimum, the following topics/deliverables:

   a.   Points of contacts (POCs) for all parties

b. Draft Project Management Plan (PMP) (Section F, Deliverable 06) and discussion including schedule, tasks, etc.
c. Personnel discussion (i.e., roles and responsibilities and lines of communication between contractor and Government)
d. Staffing Plan and status
e. Transition-In Plan (Section F, Deliverable 13) and discussion
f. Security discussion and requirements (i.e., building access, badges, Common Access Cards (CACs))
g. Invoicing requirements
h. Transition discussion
i. Updated Baseline Quality Control Plan (QCP) (Section F, Deliverable 10)

The Government will provide the contractor with the number of Government participants for the Kick-Off Meeting and the contractor shall provide sufficient copies of the presentation for all present.

The contractor shall draft and provide a Kick-Off Meeting Minutes Report (Section F, Deliverable 36) documenting the Kick-Off Meeting discussion and capturing any action items.

C.5.1.3 SUBTASK 3 – PREPARE A MONTHLY STATUS REPORT (MSR)

The contractor shall develop and provide an MSR (Section J, Attachment F) (Section F, Deliverable 03). The MSR shall include the following:

a. Activities during reporting period, by task (include on-going activities, new activities, and activities completed, and progress to date on all above mentioned activities). Each section shall start with a brief description of the task.
b. Problems and corrective actions taken. Also include issues or concerns and proposed resolutions to address them.
c. Personnel gains, losses, and status (security clearance, etc.).
d. Government actions required.
e. Schedule (show major tasks, milestones, and deliverables; planned and actual start and completion dates for each).
f. Summary of trips taken, conferences attended, etc. (attach Trip Reports to the MSR for reporting period).
g. Accumulated invoiced cost for each CLIN up to the previous month.
h. Projected cost of each CLIN for the current month.
i. Service Level Agreement (SLAs) scorecard depicting monthly performance against Acceptable Quality Level (AQL) for each SLA.

C.5.1.4 SUBTASK 4 – CONVENE TECHNICAL STATUS MEETINGS

The contractor PM shall convene a monthly Technical Status Meeting with the USG Program Office TPOC, FEDSIM COR, and other Government stakeholders (Section F, Deliverable 04).

The purpose of this meeting is to ensure all stakeholders are informed of the monthly activities and MSR, provide opportunities to identify other activities and establish priorities, and coordinate resolution of identified problems or opportunities. The contractor PM shall provide minutes of these meetings, including attendance, issues discussed, decisions made, and action items assigned, to the FEDSIM COR within five workdays following the meeting (Section F, Deliverable 05).

C.5.1.5 SUBTASK 5 – PREPARE A PMP

The contractor shall document all support requirements in a PMP. The contractor shall provide the Government with a draft PMP (Section F, Deliverable 06) on which the Government will make comments. The final PMP (Section F, Deliverable 07) shall incorporate the Government's comments.

The PMP shall:

a. Describe the proposed management approach.
b. Contain detailed Standard Operating Procedures (SOPs) for all tasks and subtasks.
c. Include milestones, tasks, and subtasks required in this TO.
d. Provide for an overall Work Breakdown Structure (WBS) with a minimum of three levels and associated responsibilities and partnerships between Government organizations.
e. Describe in detail the contractor's approach to risk management under this TO.
f. Describe in detail the contractor's approach to communications, including processes, procedures, communication approach, and other rules of engagement between the contractor and the Government.

The contractor shall prepare and update, as directed, an SLA (Section F, Deliverable 35) for Government review and approval. The SLAs shall include details on the performance measures, AQLs, and monitoring methods as indicated (Section J, Attachment Y).

C.5.1.6 SUBTASK 6 – UPDATE THE PMP

The PMP is an evolutionary document that shall be updated annually at a minimum (Section F, Deliverable 08). The contractor shall work from the latest Government-approved version of the PMP.

C.5.1.7 SUBTASK 7 – PREPARE TRIP REPORTS

The Government will identify the need for a Trip Report when the request for travel is submitted (Section F, Deliverable 09). The contractor shall keep a summary of all long-distance travel including, but not limited to, the name of the employee, location of travel, duration of trip, and POC at travel location. Trip reports shall also contain Government approval authority, total cost of the trip, a detailed description of the purpose of the trip, and any knowledge gained. At a minimum, trip reports shall be prepared with the information provided in Section J, Attachment G.

C.5.1.8   SUBTASK 8 – UPDATE BASELINE QCP

The contractor shall update the baseline QCP submitted with its proposal (Section F, Deliverable 10) and then provide a final baseline QCP as required in Section F (Section F, Deliverable 11). The contractor shall periodically provide QCP updates, as required in Section F (Section F, Deliverable 12), as changes in program processes are identified.

Within the QCP, the contractor shall identify its approach for providing quality control in meeting the requirements of the TO. The contractor's QCP shall describe its quality control methodology for accomplishing TO performance expectations and objectives. The contractor shall fully discuss its validated processes and procedures that provide high quality performance for each Task Area. The QCP shall describe how the processes integrate with the Government's requirements.

The Government will monitor performance utilizing a Quality Assurance Surveillance Plan (QASP) (Section J, Attachment O).

C.5.2   TASK 2 – PROVIDE TRANSITION SUPPORT

The contractor transition support shall include having all tasks fully staffed with fully qualified personnel, having a plan to integrate staff and assure staff is fully trained, taking over services with no degradation to services, contractor assuming full responsibility for management of all TO requirements, as well as having a plan to transition and deliver all material and information to the Government at the end of the TO.

The contractor shall provide additional augmented support in response to identified crisis action matters with the urgency the matter entails. Additional augmented support shall be staffed and worked within USG Program Office spaces, following the first notification informing the contractor of a request for augmented support.

C.5.2.1   SUBTASK 1 – TRANSITION – IN

The contractor shall update the draft Transition-In Plan (Section F, Deliverable 13) provided with its proposal and provide a final Transition-In Plan as required in Section F (Section F, Deliverable 14). The contractor shall ensure that there will be minimum service disruption to vital Government business and no service degradation during and after transition. The contractor shall implement its Transition-In Plan No Later Than (NLT) ten calendar days after Project Start (PS), and all transition activities shall be completed 90 days after approval of the final Transition-In Plan (Section F, Deliverable 14).

C.5.2.2   SUBTASK 2 – TRANSITION-OUT

The contractor shall provide Transition-Out support when required by the Government. The Transition-Out Plan shall facilitate the accomplishment of a seamless transition from the incumbent to an incoming contractor/Government personnel at the expiration of the TO. The contractor shall provide a draft Transition-Out Plan within six months after PS (Section F, Deliverable 15). The Government will work with the contractor to finalize the Transition-Out Plan (Section F, Deliverable 16) in accordance with Section E. At a minimum, the Transition-

Out Plan shall be reviewed and updated on an annual basis (Section F, Deliverable 17). Additionally, the Transition-Out Plan shall be reviewed and updated quarterly during the final Option Period (Section F, Deliverable 17).

In the Transition-Out Plan, the contractor shall identify how it will coordinate with the incoming contractor and/or Government personnel to transfer knowledge regarding the following:

a. Project management processes
b. POCs
c. Location of technical and project management documentation
d. Status of ongoing technical initiatives
e. Appropriate contractor to contractor coordination to ensure a seamless transition
f. Transition of Key Personnel
g. Schedules and milestones
h. Actions required of the Government

The contractor shall also establish and maintain effective communication with the incoming contractor/Government personnel for the period of the transition via weekly status meetings or as often as necessary to ensure a seamless transition-out.

The contractor shall implement its Transition-Out Plan NLT six months prior to expiration of the TO.

C.5.3 TASK 3 – PROVIDE ENGINEERING SUPPORT

The contractor shall provide technical and engineering support services in all phases of procurement, programming, installation, testing, implementing, operation, and necessary maintenance related to worldwide fielding of customer assigned projects and systems. As part of this support, the contractor shall provide complete, operational information systems integrated with full command and control architecture. The contractor shall conduct system requirements gathering and participate in analyses, studies, exercises, tests, evaluations, and demonstrations for the customer. The contractor shall review and/or develop plans and methodologies to successfully design, develop, integrate, and/or migrate networks, systems, applications, databases, and/or infrastructures. All plans shall be approved by the USG Program Office, before the contractor can start the build, integration, or implementation of the proposed solution. This shall include requirements analysis and definition as well as preparation of resulting documentation. In addition, the contractor shall provide expertise and support in system engineering, components, and subsystems; and, the contractor shall ensure the interoperability of proposed systems to existing networks and systems including strategic and tactical communications facilities, ground vehicle, maritime, and airborne platforms.

The contractor shall design, build, procure, and integrate new specialized networking attribution technologies and secured architectures with no attribution to the Government, where appropriate, as well as provide the Government with the technical expertise in low-visibility network operations and secure communications strategies.

The contractor shall provide technical support to the customer in the establishment of sound and consistent processes for making telecommunications decisions, implementing customer-approved architecture and standards, managing overall voice, data, and visual communications assets (e.g., massive data processing infrastructure, applications and system software, secure communications networks, and telecommunications support resources), and making sound recommendations.

The contractor shall develop a System Functional Requirements Document (SFRD) (Section F, Deliverable 19) and an Engineering and Installation Plan (EIP) (Section F, Deliverable 20) for each project that is supported under this task and all of its subtasks. The EIP shall include the associated costs for the development, testing, and include but no limited to, the costs for the hardware, software, tools, licenses, maintenance, life cycle management. Once the designed solution is approved by the USG Program Office through the SFRD, EIP and other applicable deliverables required in Section C.5, the contractor shall build the approved solution and install or integrate the solution in accordance with (IAW) Section C.5.5.

C.5.3.1 SUBTASK 1 – ENTERPRISE ARCHITECTURE SUPPORT

The contractor shall design, build and integrate an architecture that is standardized and works together to reduce complexity. The architecture shall enable the Government and the supported organizations that ingest data from collection of manned and unmanned sensors to find and fix high value targets of interest in a myriad of environments. The contractor shall execute the following tasks and identify unique and distinct technologies and services and integrate them into the architecture.

   a. The contractor shall provide an eMAPS architecture consisting of open source, COTS and/or GOTS software services solution capable of operating in global environments to include expeditionary, mounted, dismounted, operating bases, fixed ground stations, and garrison headquarters. Additionally, the contractor shall describe the following:
      1. The specifications for each environment.
      2. The architecture's ability to scale to the support adding additional organizations and additional users.
      3. What the architecture looks like when deployed.
         i. If deployed, identify the locations and organizations that are using these types of form factors.
      4. Current gaps in the architecture and where the contractor recommends the Government fill those gaps – by location and organization.
      5. The methods for monitoring and managing the architecture.
      6. The applications and web services that comprise the architecture.
      7. How the architecture will exchange data (i.e., send and receive).
   b. The contractor shall provide an eMAPS architecture consisting of open source standard architecture with web services and mobile applications capable of geospatially rendering, visualizing, and searching connected data repositories. The solution shall be capable of

distributing the data across an open standards architecture and continually execute machine learning. Additionally, the contractor shall describe the following:

1. The application and services that comprise the architecture.
2. The functions and features of each application and web service.
3. The method used to distribute and share data across the architecture.
4. The file types, data standards, and network standards.
5. The Geospatial Intelligence (GEOINT) cloud services utilized to provide near real-time imagery updates.
6. The GeoServer and Cesium technologies used for the architecture.
7. Training to be used to train a user eight hours or less on any applications and web services developed and fielded as part of this effort.
8. The Application Program Interface format.

c. The contractor shall provide an eMAPS architecture that distributes data over an architecture that contains no single point of failure and replicates data to a number of nodes across multiple data centers. The architecture shall be capable of managing bandwidth to ensure disadvantaged users at remote sites, who do not contain a vast amount of resources, are active nodes within the eMAPS architecture. Additionally, the contractor shall describe the following:

1. The high availability through redundant services.
2. The quality service approach utilized and how it interfaces with the Differentiated Services Code Point (DSCP) levels.
3. The Continuity of Operations Plan.
4. The load balancing and automatic failover.

d. The contractor shall provide an eMAPS architecture through RMF at the continuous monitoring level and simultaneously maintaining an Authority to Operate (ATO) on several networks. The eMAPS solution shall be Advanced Encryption Standard (AES)-128 and AES-256 compliant and employ Lightweight Directory Access Protocol (LDAP) to enable lookups via Active Directory Federated Services (ADFS) and Public Key Infrastructure (PKI). The architecture shall authenticate via Kerbos, ADFS, and PKI and establish two-way LDAP, Forrest Trust, ADFS, or PKI. Additionally, the contractor shall describe the following:

1. The RMF process to obtain or maintain the IC Directive 503 RMF.
2. The application of attribute based security.
3. The application of user authentication and authorization.
4. The established technical controls for handling Foreign Intelligence Surveillance Act (FISA) data.

e. The contractor shall provide an eMAPS architecture to support integrated Commercial Cloud Services (C2S) (such as Amazon Web Services (AWS) Microsoft Azure, etc.) solution for the applications and software defined networking and storage capabilities, applications, and systems operating in these cloud constructs and environments. These

solutions shall provide C2S architectures for classifications from unclassified through TS. Additionally, the contractor shall describe the following:

1. The architecture design when it is deployed.
2. The applications and web services that comprise the cloud architecture.

f. The contractor shall provide an eMAPS architecture through an agile software development and operations environment and an architecture that will continuously evolve as technologies advance and progress that can withstand a dynamic requirements process. The eMAPS architecture shall be capable of integrating new data sources without any major disruption to the architecture through each development cycle. Additionally, the contractor shall describe the following:

1. The software development and operations process.
2. The minimum and maximum number of software releases each year.
3. The maintenance plan for data in its raw state.
4. The integration of data sets supporting multiple disciplines to include intelligence, public affairs, operations, information operations, and PAI.

g. The contractor shall provide an eMAPS architecture with mobile, mobility, and wireless capabilities that enables organizations to operate at a minimum with multiple mobile platforms (e.g., Android and Windows) and tough books. Additionally, the contractor shall describe the following:

1. The architecture design when it is deployed.
2. The applications and web services that comprise the architecture.
3. The integration of the mobile, mobility, and wireless capabilities into the eMAPS architecture.
4. The ruggedized, lightweight, and expeditionary platform that supports disconnected operations for the Mission Command design when it is deployed.

h. The contractor shall provide an integrated eMAPS architecture to produce, report, forecast, and analyze various data and PAI. The contractor shall integrate multiple offices, directorates into a professionally branded PAI construct supporting multiple disciplines to include intelligence, public affairs, operations, and information operations. Additionally, the contractor shall describe the following:

1. The architecture design when it is deployed.
2. The applications and web services that comprise the architecture.
   i. The contractor shall provide user guides, technical guides, and training to the user community for capability delivered. Documentation shall include Interface Control Documentation for all systems and subsystems and shall include any other documentation specified by the Government.

C.5.3.2 SUBTASK 2 – MACHINE LEARNING SERVICES

The contractor shall design, build and integrate an architecture that enables the Government to provide enterprise machine learning services for a wide range of disciplines and missions in all environments globally to include expeditionary, mounted (e.g., maritime, vehicles, aircraft),

dismounted, operating bases, fixed ground stations, and garrison headquarters. Additionally, the contractor shall provide the following:

a. Data analytics and coding to predict, uncover, and determine historical relationships and trends data. The contractor shall focus on machine learning at a minimum in the following categories: geospatial, development operations, cyber security, psychological profiles, social media, text categorization, and video. Additionally, the contractor shall describe the following:

   1. The architecture design when it is deployed.
   2. The applications and web services that comprise the architecture.
   3. The disciplines and types of data that can be supported by the machine learning services.

b. An architecture that supports the following video analytics attributes at a minimum:

   1. Renders bounding boxes with labels on top of the video.
   2. Bounding boxes shall be colored by label.
   3. Bounding boxes shall disappear after one second.
   4. Contain a quick-action button that grabs frame with embedded overlays and stores the erroneous frame in a directory.
   5. Object detection results consist of 0601 Key-Length Value (KLV) format with additional object detection field in eXtensible Markup Language (XML) and/or Javascript Object Notation (JsON).
   6. Side-by-side full motion video and COP within a singular application.
   7. Rewind and fast forward up to a speed multiplier of 32 (32x).
   8. Exploit full motion video frame-by-frame.
   9. Advance video analytics while streaming real-time video and creating products with contrast enhancement, brightness, hue/saturation/gamma, and inverted pixels.
   10. Visualizes object detection results in real time geospatially.
   11. Visualizes entities by track identification on the map.
   12. Implements the COTS specifications with 4-corner information, entity label, entity name, confidence percentage, and video Presentation Timestamp (PTS) information from Minotaur.
   13. Geo-rectifies bounding boxes using 4-corner KLV.
   14. Alerts users when their geospatial boundary that contains an object based on a sensor footprint and labels within the video stream.
   15. Enterprise object detection architecture enables object detection results to be visualized and provides a rewind function for all object detection results in time.
   16. Stores object detection results so that they can be correlated with the correct sensor and played back over the video at exactly the correct time.
   17. Translate documents from multiple foreign languages to English to include, at a minimum, Arabic, German, Russian, Persian, Kurdish, and Tajik.

18. Categorize multi-media such as images and videos and entities identifying personnel, vehicles, installations, and equipment.
19. Establish automated workflows for forensic imaging and data export for common device types including but not limited to smart phones, flash memory devices such as Secure Digital (SD) cards and USB drives, hard disk drives, and optical media.
20. Perform Optical Character Recognition (OCR) to convert images of text to editable text file.
21. Provide for learning feedback mechanism to further refine contextual translation ability when dealing with phrases vice literal word for word translations.
22. Provide ability to perform real-time Binary Large OBject (BLOB) type analysis and classification in video into categorical typesets including but not limited to person, vehicle, building.
23. Provide ability to perform BLOB type analysis and classification in still imagery into categorical typesets including but not limited to person, vehicle, building.
24. Establish baseline supervised correlation algorithms for geospatial, social, and event-based associations.

C.5.3.3 SUBTASK 3 – PERSISTENT SERVICES

The contractor shall design, build and integrate an architecture that provides mechanisms for employing both the required internal and external business standards. These services shall enable the Government and supported organizations to provide persistent services for planning, command and control, processing, exploitation, and dissemination. These services also include IT type services. The contractor shall execute the following tasks and also identify unique/distinct technologies and services.

a. Provide an eMAPS architecture to support enterprise chat, video, voice, and mapping services. Additionally, the contractor shall describe the following:
   1. The architecture design when it is deployed.
   2. The applications and web services that comprise the architecture.

b. Provide an eMAPS architecture to support social networking, multi-media, PAI, and key performance indicators. Additionally, the contractor shall describe the following:
   1. The architecture design when it is deployed.
   2. The applications and web services that comprise the architecture.

c. Provide an eMAPS architecture with data analytics to support PAI and/or commercially available information. Additionally, the contractor shall describe the following:
   1. The architecture design when it is deployed.
   2. The applications and web services that comprise the architecture.
   3. The design of the entity resolution, disambiguation, tracking of entities across platforms, and geographies when deployed.

d. Provide an eMAPS architecture with data analytics to support operational environment (terrain and threat), course of action analysis, develop and visualize a COP, hypothesize future threat actions, targets effects (i.e., plan, execute, and assess), and information collection analysis. Additionally, the contractor shall describe the following:

1. The architecture design when it is deployed.
2. The applications and web services that comprise the architecture.

e. Provide an eMAPS architecture to support decisive action training environment, enable each warfighting function to include intelligence, mission command, movement and maneuvers, fires, sustainment and protection, full spectrum operations, and ensure interoperability between the conventional army, Special Operation Forces (SOF), IC, law enforcement, and coalition partners. Additionally, the contractor shall describe the following:

1. The architecture design when it is deployed meets the following characteristics:
   i. Open Systems / Standards Architecture.
   ii. An elastic (scalable, robust) architecture.
   iii. Integrates intelligence with operations and staff services.
   iv. Minimum of TRL 7.
   v. Capable of obtaining Joint Interoperability Test Center (JITC) compliance.
   vi. Has a completed RMF Body of Evidence (BoE) and is ready for ATO submittal.
   vii. Provides full motion video management services, collection management services, and geospatial services.
   viii. Supports multi-media data.
2. The applications and web services that comprise the architecture.

f. The contractor shall provide support with the Operations and Maintenance (O&M), troubleshooting, and repair of supported systems. The contractor shall analyze test data and report the results in an O&M Status Report (Section F, Deliverable 21).

g. The contractor shall modify application software to include corrective maintenance, preventative maintenance, and modifications needed to meet new user requirements or changes in underlying design. In addition, the contractor shall install and configure automated tools to track network configuration; monitor status and performance; detect, diagnose, and resolve network problems; and project future capacity requirements.

C.5.3.4 SUBTASK 4 – COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, AND INTELLIGENCE (C4I) SYSTEMS INTERGRATION SUPPORT

The Government is seeking full lifecycle support for next generation compute, storage, networks, governance, and software/systems development to enhance current and future capabilities of sensors, analytics, software and systems development, business and IT automation, and IT operations. The contractor shall provide governance, compliance, and risk support and consulting for enterprise IT. This support includes, but is not limited to:

a. Obtaining, connecting, securing, developing, and optimizing resources and applications in cloud environments.
b. Developing software and systems for service delivery in global, resource constrained infrastructures.
c. Developing, deploying, analyzing, and securing IoT technologies and infrastructures.
d. Designing, deploying, maintaining, and provisioning distributed High Performance computer environments.
e. Automating and optimizing IT Operations through process improvements, governance, and software.
f. Improving business processes and automation for Human Resource (HR), Logistics, Operations, Plans, Contracting, and Finance.
g. Designing, deploying, operating, maintaining, and securing software-defined infrastructures.
h. Delivering global, near real-time live and on-demand full motion video to robust and austere environments.
i. Providing managed services and SLAs development for global terrestrial and non-terrestrial WANs, situational awareness networks and devices, IT operations, and video distribution.
j. Developing, creating and integrating content, analyzing, and deploying augmented reality and virtual reality technologies and systems.
k. Providing support with the O&M, troubleshooting, and repair of supported systems. The contractor shall analyze test data and report the results in an O&M Status Report (Section F, Deliverable 21).
l. Modifying application software to include corrective maintenance, preventative maintenance, and modifications needed to meet new user requirements or changes in underlying design. In addition, the contractor shall install and configure automated tools to track network configuration; monitor status and performance; detect, diagnose, and resolve network problems; and project future capacity requirements.

Performance under this task shall at a minimum utilize the following industry best practices as necessary:

a. Service-oriented Architectures and Micro services.
b. Project Management Body of Knowledge (PMBOK).
c. Agile Development.
d. Information Technology Infrastructure Library (ITIL).
e. Information Systems Audit and Control Association (ISACA) Control Objectives for Information and Related Technologies (COBIT).
f. Department of Defense Architecture Framework (DoDAF), The Open Group Architecture Framework (TOGAF), or Federal Enterprise Architecture Framework (FEAF).

C.5.3.5   SUBTASK 5 – C4I TRANSMISSIONS SYSTEMS SUPPORT

Contractor support shall include network transmissions systems innovation through responsive support. The contractor shall have the ability to develop, build and integrate network transmission capabilities across air, land, sea, and space platforms. The Government requires full programmatic support through all phases of project management. The support shall include problem identification and analysis, development of material solutions, test and evaluation of candidate material solutions, fielding, and sustainment. This support includes:

a.   Analysis:

1.   Supporting LOS and BLOS RF transmissions systems including, but not limited to, handheld and man-pack radios, RF data links such as Link 16, CDL and BECDL, Full Motion Video Distribution Systems, Geosynchronous, Medium Earth Orbit and Low Earth Orbit satellite architectures, infrastructure, and earth terminals ranging from less than 30 centimeters to greater than seven meters. Supporting airborne, maritime, and ground vehicular Communications On-the Move (COTM) capability and supporting surrogate satellite or near space vehicles.

2.   Conducting in depth studies and analysis in order to inform acquisition decisions.

3.   Conducting objective market analysis to determine the ability of industry to meet material requirements through COTS capability or to inform the Government on the need to develop a solution to meet a capability gap.

4.   Conducting network architecture studies in order to inform the Government of the latest trends in network transport capability that might better support the Government and how best to integrate new capability into the existing Government architecture.

b.   Development:

1.   Developing material solutions to capability gaps that cannot be resolved through changes in Tactics, Techniques, and Procedures (TTP).

2.   Creating innovative methods to enable the Government to realize operational capability in an 18-month window from idea to field able capability within the DoD acquisition process.

3.   Conducting developmental testing, operational user assessments and interface, and supporting testing with interoperability agencies such as the National Assessment Group (NAG) and the JITC.

4.   Developing test plans (Section F, Deliverable 29), executing testing, and documenting results.

5.   Integrating critical transmissions capabilities across air, land, sea, and space platforms.

6.   Developing and integrating mission module capability into the Next Generation Handheld and Manpack radio via either a mission module for the handheld radio or via a module in suitable form factor to fit within the design of the Next Generation Manpack radio. This effort includes developmental efforts related to next generation waveforms for both LOS and BLOS capabilities.

7. Developing transmission systems test payloads and integrating test payloads onto select fixed wing and other manned and unmanned near space vehicles.

8. Modifying and integrating select COTS based LOS and BLOS antennas and other communications capabilities for government use, including hardening these capabilities in order to meet Governmental requirements for environmental exposure, shock, and vibration in a military environment. Additionally, ensure compliance for electromagnetic interference and electromagnetic compatibility for use on select ground vehicular, maritime, and airborne platforms.

9. Conduct pre-planned product improvement (P3I) efforts to previously fielded C4ISR capabilities. This includes integration and test of P3I related efforts post upgrade resultant from the P3I effort.

10. Test and integrate into the existing C4ISR architecture select commercial service based capabilities, COTS, and GOTS capabilities.

c. Fielding and Sustainment:

1. Fielding material solutions to CONUS and OCONUS locations.
2. Supporting Cyber compliance for material solutions.
3. Drafting Fielding and Deployment Release, DD form 1494, and other documents required for fielding new capability.
4. Sustaining fielded capability through the Government Configuration Management and Life Cycle Sustainment process. This includes building and managing a Government provided Portal site providing ready visibility to all sustainment activities for the Government.
5. Procuring capability as required by the customer.
6. Providing support with the O&M, troubleshooting, and repair of supported systems and analyzing test data and reporting the results in an O&M Status Report (Section F, Deliverable 21).
7. Modifying application software to include corrective maintenance, preventative maintenance, and modifications needed to meet new user requirements or changes in underlying design. In addition, installing and configuring automated tools to track network configuration; monitoring status and performance; detecting, diagnosing, and resolving network problems; and projecting future capacity requirements.

C.5.4 TASK 4 – PROVIDE CAPABILITY AND ASSET MANAGEMENT SUPPORT

The contractor shall research, develop, and analyze related capabilities and tools. The contractor shall investigate emerging technologies and provide recommendations based on their applicability to the USG Program Office's systems. The contractor shall apply a structured methodology to evaluate and recommend COTS hardware, software, and services to meet specific requirements; adjusting the methodology, when warranted, including prototypes and pilots to address risk. The contractor shall consider Government systems and security agencies (such as JITC) in making these recommendations.

In providing this support, the contractor shall:

a. Inventory and manage existing assets for use when requests or requirements from components are received. This data will be inputted to an existing inventory management system.
b. Provide recommendations for tools and applications.
c. Support performance data transfer.
d. Review new and legacy capabilities.
e. Provide expertise and input to market research documentation.
f. Provide input to technical staff in brainstorming sessions.

In addition, the contractor shall provide unique access to and procurement mechanisms for PAI from industry and other Government –approved data sources. The contractor shall provide an inventory of assets purchased and location, as well as planned purchases (Section F, Deliverable 22).

C.5.5 TASK 5 –PROVIDE TECHNICAL INSTALLATION AND INTEGRATION SUPPORT

The contractor shall manage all aspects of the executive staff communication portfolio to include the design, build out and integration of hardware and specialized applications, systems, and platforms that will integrate with existing command architectures and networks.

The contractor shall also support the design, build, installation, and integration of the systems and applications developed in Section C.5.3, as applicable, as well as ensure that all systems and applications are fully integrated into legacy systems and architectures and are consistent with combining all essential elements of information into a single, unified network transportation architecture.

The contractor shall support all communications platforms including ground based vehicular, maritime, and airborne platforms.

Satellite bandwidth required for supporting this effort will be funded by the USG Program Office.

C.5.5.1 SUBTASK 1 – EMAPS ENVIORNMENT BUILD/DEVELOPMENT SUPPORT

The contractor shall develop, build, or produce hardware, software, source codes, and application products to support the eMAPS requirements. Upon approval from the USG Program Office on the designed eMAPS solution to include but, not limited to Enterprise Architecture Support, Machine Learning Services, and Persistent Services and associated documents, the contractor shall develop and build the approved solution. Once the solution is built, tested and approved by the USG Program Office it shall be installed and implemented in the active operational environment. The development and build out not only applies to software, applications, source code, hardware, automated tools, but also all related source and installation build instructions and utilities sufficient to reconstruct the installation media, test installation, and perform testing.

The contractor's development environment shall conform to the following guidelines:

a. The development environment shall be logically isolated from other networks, to include corporate enterprise and other classified and unclassified networks.

b. Security Program guidelines for the environment shall be prepared and delivered to the Government for review and approval before developing any software, application, source code, or hardware.

c. The Security Program implemented shall use the security controls described in National Institute of Standards and Technology (NIST) Special Publication 800-53 (latest revision), Recommended Security Controls for Federal Information Systems and Organizations as a guide.

d. The development environment shall be isolated and protected via Government approved firewall technology from the contractor's corporate (and other) network, and when accessed remotely, meet the DoD standards for remote access.

The contractor shall provide hardware and media (Section F, Deliverable 37) for all source code, software, applications, hardware, installation kits, documentation (including those related to architecture, test design and test results, and installation procedures), build procedures/scripts, and any other eMAPS capabilities developed under this TO in a secure manner at the end of each project or as requested by the Government.

C.5.5.2 SUBTASK 2 – PROVIDE TECHNICAL INSTALLATION AND IMPLEMENTATION SUPPORT

The contractor shall conduct initial site surveys at sites provided by the Government. The contractor shall analyze site communications requirements and recommend the necessary complements of equipment to satisfy specific communications and intelligence requirements provided by the Government. The contractor's analysis shall consider site missions and equipment capabilities to achieve an optimum utilization of ground equipment and satellite resources. The contractor shall assure communications equipment accessibility and an acceptable environment, as well as ensure that equipment that will be installed does not interfere with local facilities. The findings of this survey shall be provided in a Site Survey Report (SSR) and Project Concurrence Memorandum (PCM) (Section F, Deliverable 23).

The contractor shall develop the Site Preparation Plan (Section F, Deliverable 24) required to ready a new or existing site to accept new equipment. This plan shall describe the civil, structural, mechanical, and electrical requirements necessary to meet the operating requirements of the new equipment. During this phase the contractor shall develop a Configuration Management Plan (CMP) (Section F, Deliverable 25) and Task Execution Plan (Section F, Deliverable 26). The contractor shall support the design, build, installation and implementation of these systems and applications to include but, not limited to Enterprise Architecture Support, Machine Learning Services, and Persistent Services, as required. In order to accomplish this, the contractor shall perform site surveys and prepare Facility Design Criteria (FDC) (Section F, Deliverable 27), Interface Control Documents (ICDs) (Section F, Deliverable 28), Test Plans (Section F, Deliverable 29), and systems acceptance and accreditation documentation.

As required and identified by the Government, the contractor shall translate system design into testable, maintainable software modules that meet user and design requirements; apply iterative

approaches to facilitate staged testing, implementation, and deployment; and apply Commercial Automated Software Engineering (CASE) tools to prototyping activities.

C.5.5.3   SUBTASK 3 – TESTING

The contractor shall support the testing of the systems and applications developed in Section C.5.3 to include but not limited to Machine Learning Services and Persistent Services, as applicable, to obtain requisite certifications. These certifications include but are not limited to ATO from the designated approval authority, NAG evaluation, as well as Joint Interoperability Certification and Assessment from the JITC. Prior to conducting testing, the contractor shall develop a Test Plan (Section F, Deliverable 29). The contractor shall perform analyses, evaluations, tests, reviews, studies, as required, and document and assist in all efforts associated with engineering/configuration support and documentation on various telecommunications systems, such as on Unclassified, Secret, and TS networks. These services may include preparing, reviewing, and/or updating Prime Item Specifications, performing Producibility Engineering and Planning (PEP) and Pre-Production Readiness Production Evaluations (Section F, Deliverable 30), and evaluating material change suggestions and other scientific and technical reports. Further, the contractor shall provide Computer-Aided Design (CAD) design documents (Section F, Deliverable 31) and capabilities to include scanning, plotting, managing, and storing of drawings in digital or analog format.

The contractor shall provide the technical and management support necessary to ensure the customers are able to execute equipment, contractor, and in-house test programs efficiently, effectively, and within established schedule guidelines. The contractor shall assist the Government with designing, planning, and managing test programs that minimize overall programmatic risk thereby increasing the likelihood of efficient, cost-effective initial fielding and lifecycle support of equipment.

The contractor shall test and exercise the appropriate configurations of multiple hardware or software components of information systems or communications networks as necessary to deliver stated levels of performance, interoperability, and maintenance support within the known constraints of the customer or the supported organization's telecommunications infrastructure. Prior to the completion of testing, the contractor shall develop a Technical Acceptance Recommendation (Section F, Deliverable 32) documenting the findings. The Technical Acceptance Recommendation shall be provided to the USG Program Office and FEDSIM COR for review and approval. The contractor shall be available to address any issues encountered during installation, test, or resolve any problems as requested.

C.5.6   TASK 6 –PROVIDE TRAINING AND SYSTEM TRANSITION SUPPORT

The contractor shall provide initial, specialized, technical, and administrative training for the applications and systems developed and procured under this TO to provide the Government with the necessary knowledge to effectively use and manage the systems and applications being fielded and supported. The contractor shall also provide user familiarity training and system management training for the systems and applications developed under this TO. The contractor

shall document the training manuals and transition milestones and objectives in a Training Plan (Section F, Deliverable 33).

The contractor shall perform the specified training in both CONUS and OCONUS locations. The contractor shall be prepared to provide training to both Government and non-Government personnel, as well as training specifically developed for approved foreign nationals. The contractor shall also assist the Government in transitioning the system to Government management, as applicable.

The contractor shall provide the following engagement activity support:

    a. Develop, maintain, and periodically publish Training Materials (Section F, Deliverable 34) to ensure an informed and knowledgeable workforce. Training materials include, at a minimum, the following:
        1. Training plans
        2. Training schedules
        3. Procedural documents that may be required

    b. Develop and update classes including any associated training aids, exercises, and tests. Activities required for course instruction include, at a minimum, the following:
        1. Securing classroom locations
        2. Preparing/disseminating course announcements
        3. Registering students
        4. Preparing instructional materials and classrooms
        5. Coordinating with Subject Matter Experts (SMEs)
        6. Preparing certificates

    c. Maintain training records in a database that can easily be manipulated to gather the tailored statistics required by the Government.
    d. Each training course shall be piloted to obtain feedback and updated as necessary to include modifications to the class format, duration, and content.
    e. Maintain the internal Evaluator Development Training Program, which determines evaluator training requirements and how they will be met.
    f. Maintain records that facilitate determining each evaluator's developmental progression.

Training will be conducted in CONUS and OCONUS locations as directed by the Government. Classes may vary in length and in attendees.

C.5.7 TASK 7 – PROVIDE ADDITIONAL EMAPS AUGMENTED SUPPORT (OPTIONAL)

Unpredictable world events require that the USG Program Office have the capability to provide reach-back, additional augmented personnel, support to provide additional eMAPS support to combat threats and conduct SOF activities in pressing situations. The Government reserves the right to exercise additional eMAPS augmented support services at any point during the TO performance, in accordance with the terms and conditions of the contract. The contractor shall

provide additional augmented support for any requirement in Section C.5 that is within the scope of the TO. These events may be in conjunction with other USG and DoD organizations as a result of SOF activities in the USG and DoD. Additional as-needed expansion support requirements to counter unknown threats may be variable in length, but the period of performance of each optional CLIN cannot exceed the period in which the optional CLIN is exercised by the FEDSIM CO. The contractor shall meet and maintain requirements identified by the USG Program Office TPOC and the FEDSIM COR during events of contingency, training situations, or wartime in order to support directed expansion planning, exercises, and operations when required by the USG Program Office. Examples include additional cleared and qualified Engineering personnel to provide complimentary communications support during events that require additional support.

When the requirement for additional eMAPS augmented support is identified, the Government will notify the contractor in advance and exercise the optional additional augmented support. The additional augmented support shall not result in a decrease of support to other TO requirements unless approved by the FEDSIM CO and COR.

The following applies to the performance of eMAPS additional augmented support:

a. The Government will determine the amount of additional eMAPS augmented support required at the time of the crisis action matter. Each crisis action matter may require a different amount and length of augmented support.

b. The contractor shall provide additional eMAPS augmented support in response to identified crisis action matters with the urgency the matter entails. Additional eMAPS augmented support shall be staffed and worked within USG Program Office spaces, following the first notification informing the contractor of a request for additional augmented support

Once a crisis action matter has been declared ended or the additional augmented support is no longer needed, the contractor shall proceed with an orderly and efficient transition-out period NTE 30 days. During the transition-out period, the contractor shall fully cooperate with, and assist the Government with, activities closing out the crisis action matter, developing required documentation, transferring knowledge, and documenting lessons learned.

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